

CLAIMS

- 1. A method for applying a plastic film (18) around a product (16) to be packaged, according to which method**
 - 5 - the product (16) to be packaged is moved to a position inside a plastic film girdle (18) of shrinkable and/or stretchable plastic placed on a supporting frame consisting of supporting elements (21) and having a circumference larger than the circumference of the product to be packaged, or correspondingly the plastic film girdle is moved to a position surrounding the product to be packaged,
 - 10 - whereupon the supporting frame consisting of supporting elements (21) is removed from inside the plastic film girdle (18), thus allowing the plastic film girdle to tighten around the product (16) to be packaged,
characterized in
 - that the plastic film girdle (18) is formed by winding shrinkable and/or stretchable wrapping plastic film band (15) to form a plastic film girdle (18) around the supporting frame consisting of supporting elements (21) and having a circumference larger than the circumference of the product (16) to be packaged,
 - that the product (16) to be packaged and/or the plastic film girdle (18) are/is moved so that the product to be packaged remains inside the plastic film girdle,
 - 20 - and that the supporting frame consisting of supporting elements (21) is removed from inside the plastic film girdle (18) and the plastic film girdle is allowed to tighten around the product to be packaged.
- 2. A method according to claim 1, characterized in**
 - 25 - that the plastic film girdle (18) is formed by winding wrapping plastic film band (15) around the supporting frame consisting of supporting elements (21)
 - that the wrapping plastic film band (15) supplied to form the plastic film girdle (18) is severed and, if necessary, seamed,
 - that the product (16) to be packaged and/or the plastic film girdle (18) are/is moved on
30 a track (11) so that the product to be packaged remains inside the plastic film girdle,
 - and that the supporting frame consisting of supporting elements (21) is removed from inside the plastic film girdle (18) and the plastic film girdle is allowed to shrink and tighten around the product (16) to be packaged.
- 35 3. A method according to claim 1, characterized in**
 - that wrapping film band (15) is wound over the supporting frame consisting of supporting elements (21), thus forming a plastic film girder tube (18b) on the supporting frame,

- that a plastic film girder (18a) of desired length is cut off the plastic film girder tube (18b),
- that the product (16) to be packaged and/or the plastic film girder (18) are/is moved on the track (11) so that the product to be packaged remains inside the plastic film girder (18a) cut off,
- and that the supporting frame consisting of supporting elements (21) is removed from inside the plastic film girder (18a) and the plastic film girder is allowed to shrink and tighten around the product (16) to be packaged.

10 4. A method according to claim 3, characterized in

- that wrapping film band (15) is wrapped over the supporting frame consisting of supporting elements (21) in a continuous manner so that a plastic film girder tube (18b) continuously increasing in length is formed on the supporting frame,
- that a plastic film girdle (18a) of desired length is cut off the plastic film girdle tube (18b) during the wrapping operation,
- that, while the wrapping operation is being continued, the product (16) to be packaged and/or the plastic film girdle (18) are/is moved on the track (11) so that the product to be packaged remains inside the plastic film girdle (18a) cut off,
- and that the supporting frame consisting of supporting elements (21) is removed from inside the plastic film girdle (18a) and the plastic film girdle is allowed to shrink and tighten around the product (16) to be packaged.

15 5. A device (10) for applying a plastic film (18) around a product (16) to be packaged, said device comprising

- a supporting frame consisting of supporting elements (21) and having over it a plastic film girdle (18) of shrinkable and/or stretchable plastic, said girdle having a circumference larger than the circumference of the product (16) to be packaged,
- transfer elements (11, 22, 23) for transferring the product (16) to be packaged and/or the plastic film girdle (18) so that the product to be packaged remains inside the plastic film girdle,
- means (22, 23) for removing the supporting elements (21) from inside the plastic film girdle (18), allowing the plastic film girdle to tighten around the product (16) to be packaged,

20 characterized in that the device (1) comprises

- a wrapping system (12, 13) for wrapping a shrinkable and/or stretchable plastic film band (15) from a film reel (14) over the supporting elements (21) so that the wrapping film band being wrapped forms on the supporting elements a plastic film girdle (18) tightening over the product (16) to be packaged,

- and transfer elements (11, 22, 23) for transferring the product (16) to be packaged and/or the plastic film girdle (18) formed from the wrapping plastic film band (15) so that the product to be packaged remains inside the plastic film girdle,

5 6. A device (10) according to claim 5, characterized in that

- that the supporting elements (21) of the device (10), on which the wrapping plastic film band (15) can be wrapped to form a plastic film girdle (18), form a preferably rectangular supporting frame whose width and height are larger than the width and height of the product (16) to be packaged,

10 - and that each corner of the supporting frame consisting of supporting elements (21) is provided with at least one supporting element (21), which can be moved to transfer the plastic film girdle (18) to a position around the product (16) to be packaged.

7. A device according to claim 6, characterized in that the device (10) has at

15 the corners of the supporting frame supporting element pairs (21a, 21b) which can be turned or moved away from each other to pass the plastic film girdle (18) wrapped over the supporting elements (21) to a position around the product (16) to be packaged.

8. A device (10) according to claim 6, characterized in that the device

20 comprises

- a wrapping system (12, 13) and supporting elements (21) for winding a wrapping plastic film band (15) to form a plastic film tube (18b) having a circumference larger than the circumference of the product (16) to be packaged,
- a clipper (26) for cutting the plastic film girdle (18) off the plastic film tube (18b),

25 - and which plastic film tube (18b) supporting elements (21) also constitute plastic film girdle (18) transfer elements, such as endless bands or rotating bars.

9. A device (10) according to claim 8, characterized in

30 - that, in the device, the wrapping system (12, 13) for wrapping the wrapping plastic film band (15) to form a plastic film tube (18b) is a continuously working system

35 - and that the supporting elements (21) in the device (10) consist of two parts such that the first part of the supporting elements is a base on which the wrapping of the wrapping plastic film band (15) is carried out, while the second part of the supporting elements is a transfer part for transferring the plastic film girdle (18) cut off by the clipper (26).